WE CLAIM:

1. A rotor blade of a gas turbine engine, the rotor blade comprising:

an airfoil extending from a root end to a tip end, the root end mounted to a connection apparatus for securing the blade to the engine, the airfoil having a leading edge, a trailing edge and an outer periphery, the outer periphery defined by a pressure side and a suction side each extending from the leading edge to the trailing edge;

a recess defined in the airfoil extending from tip end towards the root end, the recess having first and second sides corresponding to the airfoil pressure and suction sides; and

at least one reinforcing element disposed in the recess and extending from the first side to the second side, the element disposed in the recess in a position adapted, in use, to minimize a trailing edge bending of the blade by reason of said position of the element in the recess.

2. The rotor blade as claimed in claim 1 wherein the reinforcing element comprises a stiffening pin.

3. The rotor blade as claimed in claim 1 wherein the recess extends into the airfoil at least 50 percent of a distance between the tip end and the root end.

4. The rotor blade as claimed in claim 1 wherein the recess first and second sides extend from a recess leading edge side to a recess trailing edge side, and wherein the element in located closer to the recess

trailing edge side than to the recess leading edge side.

5. The rotor blade as claimed in claim 1 comprising at least a second element extending across the recess from the first side to the second side.

6. The rotor blade as claimed in claim 13 wherein the second pin is selectively positioned within the recess to raise a natural vibration frequency of the blade.

7. A rotor blade of a gas turbine engine, the rotor blade comprising:

an airfoil extending from a root end to a tip end, the root end mounted to a connection apparatus for securing the blade to the engine, the airfoil having a leading edge, a trailing edge and an outer periphery, the outer periphery defined by a pressure side and a suction side each extending from the leading edge to the trailing edge;

a recess defined in the airfoil extending from tip end towards the root end, the recess having first and second sides corresponding to the airfoil pressure and suction sides, the recess having a widest point, the widest point being that having a widest perpendicular distance between the first side and the second side; and

at least one reinforcing element disposed in the recess and extending from the first side to the second side, the element positioned in the recess aft of said widest point.

8. A method for impeding second mode bending in a trailing edge portion of a hollow rotor blade of a gas turbine engine, the hollow blade having a recess defined in a tip end thereof, the recess extending into the blade toward a root end, the method comprising the steps of:

providing a desired blade geometry;

analyzing the geometry to determine at least one second mode bending characteristic of the blade geometry; and

providing a reinforcing element the recess of the blade at a selected position of the blade, the selected position adapted to permit the element to minimize second mode bending in the trailing edge portion of the blade.

9. The method as claimed in claim 8 wherein the reinforcing element comprises a stiffening pin extending across the recess.

10. The method as claimed in claim 8 wherein the selected position is closer to a blade trailing edge than to a blade leading edge, and wherein the selected position is located closer to the blade tip end than to the root end.

11. The method as claimed in claim 8 further comprising the step of providing at least a second element into the recess, the second element extending across the recess, the second element provided at a second selected position, the second selected position adapted to raise a natural vibration frequency of the blade.